

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	2	"5814632".pn. "5945420".pn.	US-PGPUB; USPAT; EPO	OR	ON	2006/03/06 17:44
L3	2	riboflavin with hypercytokinemia	US-PGPUB; USPAT; EPO	OR	ON	2006/03/06 18:41
L4	0	vitamin near2 B2 with hypercytokinemia	US-PGPUB; USPAT; EPO	OR	ON	2006/03/06 18:41
L5	0	"vitamin B2" with hypercytokinemia	US-PGPUB; USPAT; EPO	OR	ON	2006/03/06 18:41
L6	0	"vitamin B2" same hypercytokinemia	US-PGPUB; USPAT; EPO	OR	ON	2006/03/06 19:13
L7	100	("vitamin B2" riboflavin) same (hypercytokinemia cytokine lymphokine)	US-PGPUB; USPAT; EPO	OR	ON	2006/03/06 19:14
L8	39	("vitamin B2" riboflavin) with (hypercytokinemia cytokine lymphokine)	US-PGPUB; USPAT; EPO	OR	ON	2006/03/06 19:44
L9	9252	("vitamin B2" riboflavin).ti,ab/ with (hypercytokinemia cytokine lymphokine)	US-PGPUB; USPAT; EPO	OR	ON	2006/03/06 19:14
L10	2	("vitamin B2" riboflavin).ti,ab. with (hypercytokinemia cytokine lymphokine)	US-PGPUB; USPAT; EPO	OR	ON	2006/03/06 19:14
L11	21	("vitamin B2" riboflavin) with "tumor necrosis factor"	US-PGPUB; USPAT; EPO	OR	ON	2006/03/06 20:22
L12	1	"5945420".pn.	US-PGPUB; USPAT; EPO	OR	ON	2006/03/06 20:22
S1	26	riboflavin with (cytokine or lymphokine)	US-PGPUB; USPAT; EPO	OR	ON	2006/03/06 18:38
S2	2	riboflavin.ti,ab. with (cytokine or lymphokine)	US-PGPUB; USPAT; EPO	OR	ON	2005/11/16 10:36
S3	2	riboflavin.ti,ab. same (cytokine or lymphokine)	US-PGPUB; USPAT; EPO	OR	ON	2005/11/16 10:43
S4	10	riboflavin.ti,ab. and (cytokine or lymphokine)	US-PGPUB; USPAT; EPO	OR	ON	2006/03/06 17:44

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssptamxgl614

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	DEC 05	CASREACT(R) - Over 10 million reactions available
NEWS	4	DEC 14	2006 MeSH terms loaded in MEDLINE/LMEDLINE
NEWS	5	DEC 14	2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER
NEWS	6	DEC 14	CA/CAPLUS to be enhanced with updated IPC codes
NEWS	7	DEC 21	IPC search and display fields enhanced in CA/CAPLUS with the IPC reform
NEWS	8	DEC 23	New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/USPAT2
NEWS	9	JAN 13	IPC 8 searching in IFIPAT, IFIUIDB, and IFICDB
NEWS	10	JAN 13	New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to INPADOC
NEWS	11	JAN 17	Pre-1988 INPI data added to MARPAT
NEWS	12	JAN 17	IPC 8 in the WPI family of databases including WPIFV
NEWS	13	JAN 30	Saved answer limit increased
NEWS	14	JAN 31	Monthly current-awareness alert (SDI) frequency added to TULSA
NEWS	15	FEB 21	STN AnaVist, Version 1.1, lets you share your STN AnaVist visualization results
NEWS	16	FEB 22	Status of current WO (PCT) information on STN
NEWS	17	FEB 22	The IPC thesaurus added to additional patent databases on STN
NEWS	18	FEB 22	Updates in EPFULL; IPC 8 enhancements added
NEWS	19	FEB 27	New STN AnaVist pricing effective March 1, 2006
NEWS	20	FEB 28	MEDLINE/LMEDLINE reload improves functionality
NEWS	21	FEB 28	TOXCENTER reloaded with enhancements
NEWS	22	FEB 28	REGISTRY/ZREGISTRY enhanced with more experimental spectral property data
NEWS	23	MAR 01	INSPEC reloaded and enhanced
NEWS	24	MAR 03	Updates in PATDPA; addition of IPC 8 data without attributes
NEWS EXPRESS			FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005. V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT http://download.cas.org/express/v8.0-Discover/
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
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NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 18:40:32 ON 06 MAR 2006

=> file medline	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'MEDLINE' ENTERED AT 18:40:49 ON 06 MAR 2006

FILE LAST UPDATED: 4 MAR 2006 (20060304/UP). FILE COVERS 1950 TO DATE.

On December 11, 2005, the 2006 MeSH terms were loaded.

The MEDLINE reload for 2006 is now (26 Feb.) available. For details on the 2006 reload, enter HELP RLOAD at an arrow prompt (=>).

See also:

<http://www.nlm.nih.gov/mesh/>
http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html
http://www.nlm.nih.gov/pubs/techbull/nd05/nd05_med_data_changes.html
http://www.nlm.nih.gov/pubs/techbull/nd05/nd05_2006_MeSH.html

OLDMEDLINE is covered back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2006 vocabulary.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s hypercytokinemia (L) riboflavin
83 HYPERCYTOKINEMIA
7272 RIBOFLAVIN
L1 0 HYPERCYTOKINEMIA (L) RIBOFLAVIN

=> s cytokine (L) riboflavin
74379 CYTOKINE
7272 RIBOFLAVIN
L2 5 CYTOKINE (L) RIBOFLAVIN

=> d 1-5 bib abs

L2 ANSWER 1 OF 5 MEDLINE on STN
AN 2005579919 MEDLINE
DN PubMed ID: 16112685
TI Inhibitory mechanisms of highly purified vitamin B2 on the productions of proinflammatory cytokine and NO in endotoxin-induced shock in mice.
AU Kodama Kohtarou; Suzuki Mamoru; Toyosawa Toshio; Araki Seiichi
CS Tsukuba Research Laboratories, Eisai Co., Ltd., 5-1-3 Tokodai, Tsukuba, Ibaraki 300-2635, Japan.. k-kodama@hhc.eisai.co.jp
SO Life sciences, (2005 Nov 26) Vol. 78, No. 2, pp. 134-9. Electronic Publication: 2005-08-19.
Journal code: 0375521. ISSN: 0024-3205.
CY England: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200512
ED Entered STN: 20051101
Last Updated on STN: 20051216

Entered Medline: 20051207

AB Inhibitory effects of highly purified vitamin B2 (**riboflavin** -5'-sodium phosphate, >97%) on the interleukin (IL)-6, macrophage inflammatory protein (MIP)-2 and nitric oxide (NO) in LPS-induced shock mice were evaluated. Vitamin B2 at 20 mg/kg (protective effect on mice mortality induced by LPS), intravenously administered 6 h after LPS injection, significantly decreased the plasma elevated levels of IL-6 and MIP-2 at 9 and 12 h. In addition, vitamin B2 lowered the tissue concentration and the mRNA expression of IL-6 in lung and those of MIP-2 in liver at 9 h. Vitamin B2 also reduced concentration of MIP-2 concentration in lung, and inhibited mRNA expression in kidney, respectively. Vitamin B2 decreased the plasma elevated NO levels in accordance with a reduction in expression of inducible NO synthase (iNOS) both at 21 and 24 h. Accordingly, the reduction in elevated plasma **cytokine** levels and NO based on the inhibitory effect on local **cytokine** mRNA expression and iNOS would be responsible for the anti-septic effect of vitamin B2.

L2 ANSWER 2 OF 5 MEDLINE on STN

AN 2005550003 IN-PROCESS

DN PubMed ID: 16081469

TI The effect of micronutrient supplementation on quality-of-life and left ventricular function in elderly patients with chronic heart failure.

AU Witte Klaus K A; Nikitin Nikolay P; Parker Anita C; von Haehling Stephan; Volk Hans-Dieter; Anker Stefan D; Clark Andrew L; Cleland John G F

CS Department of Academic Cardiology, Castle Hill Hospital, Castle Road, Cottingham, Hull HU16 5JQ, UK.. klauswitte@hotmail.com

SO European heart journal, (2005 Nov) Vol. 26, No. 21, pp. 2238-44.

Electronic Publication: 2005-08-04.

Journal code: 8006263. ISSN: 0195-668X.

CY England: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS NONMEDLINE; IN-PROCESS; NONINDEXED; Priority Journals

ED Entered STN: 20051018

Last Updated on STN: 20051215

AB AIMS: Chronic heart failure (CHF) is a common and leading cause of death in industrialized countries. The potential benefits of micronutrient supplementation in CHF are extensive. Therefore, we examined the influence of long-term multiple micronutrient supplementation on left ventricular (LV) function, levels of pro-inflammatory cytokines, and quality-of-life (QoL) in elderly patients with CHF. METHODS AND RESULTS: Thirty CHF patients [age 75.4 (0.7), mean (SEM), LV ejection fraction (LVEF) < or =35%] were randomized to receive capsules containing a combination of high-dose micronutrients (calcium, magnesium, zinc, copper, selenium, vitamin A, thiamine, **riboflavin**, vitamin B(6), folate, vitamin B(12), vitamin C, vitamin E, vitamin D, and Coenzyme Q10) or placebo for 9 months in a double-blind fashion. All subjects were on stable optimal medical therapy for at least 3 months before enrolment. At randomization and at study end, tumour necrosis factor-alpha and its soluble receptors TNFR-1 and TNFR-2 were measured and six-minute walk test and QoL were assessed. Cardiac magnetic resonance scanning was performed to evaluate cardiac dimensions and LVEF. Two patients died during follow-up. The remaining patients (14 randomized to placebo and 14 to micronutrients) were well matched for LV function, symptoms, and exercise capacity. At the end of the follow-up period, LV volumes were reduced in the intervention group with no change in the placebo group [-13.1 (17.1)% vs. +3.8 (10.0)%; P<0.05]. LVEF increased by 5.3+/-1.4% in the intervention group and was unchanged in the placebo group (P<0.05). Patients taking micronutrients also had a significant improvement in QoL score between enrolment and study end [+9.5 (1.6)%; P<0.05], whereas those taking placebo had a slight deterioration [-1.1 (0.8)%; P=0.12]. Six-minute walk test and inflammatory **cytokine** levels remained unchanged in both groups. CONCLUSION: Long-term multiple micronutrient supplementation can improve LV volumes and LVEF and QoL scores in elderly

patients with heart failure due to LV systolic dysfunction.

L2 ANSWER 3 OF 5 MEDLINE on STN
AN 2001242806 MEDLINE
DN PubMed ID: 11022875
TI The effects of a multivitamin/mineral supplement on micronutrient status, antioxidant capacity and cytokine production in healthy older adults consuming a fortified diet.
AU McKay D L; Perrone G; Rasmussen H; Dallal G; Hartman W; Cao G; Prior R L; Roubenoff R; Blumberg J B
CS Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University, Boston, Massachusetts 02111, USA.
SO Journal of the American College of Nutrition, (2000 Oct) Vol. 19, No. 5, pp. 613-21.
Journal code: 8215879. ISSN: 0731-5724.
CY United States
DT (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)
LA English
FS Priority Journals
EM 200105
ED Entered STN: 20010517
Last Updated on STN: 20010517
Entered Medline: 20010510
AB BACKGROUND: Inadequate micronutrient intake among older adults is common despite the increased prevalence of fortified/enriched foods in the American diet. Although many older adults take multivitamin supplements in an effort to compensate, studies examining the benefits of this behavior are absent. OBJECTIVE: To determine whether a daily multivitamin/mineral supplement can improve micronutrient status, plasma antioxidant capacity and cytokine production in healthy, free-living older adults already consuming a fortified diet. METHODS: An eight-week double-blind, placebo-controlled clinical trial among 80 adults aged 50 to 87 years (mean = 66.5 +/- 8.6 years). RESULTS: Multivitamin treatment significantly increased (p<0.01, compared to placebo) plasma concentrations of vitamins D (77 to 100 nmol/L), E (27 to 32 micromol/L), pyridoxal phosphate (55.1 to 75.2 nmol/L), folate (23 to 33 nmol/L), B12 (286 to 326 pmol/L), C (55 to 71 micromol/L), and improved the riboflavin activity coefficient (1.23 to 1.15), but not vitamins A and thiamin. The multivitamin reduced the prevalence of suboptimal plasma levels of vitamins E (p=0.003), B12 (p=0.004), and C (p=0.08). Neither glutathione peroxidase activity nor antioxidant capacity (ORAC) were affected. No changes were observed in interleukin-2, -6 or -10 and prostaglandin E2, proxy measures of immune responses. CONCLUSIONS: Supplementation with a multivitamin formulated at about 100% Daily Value can decrease the prevalence of suboptimal vitamin status in older adults and improve their micronutrient status to levels associated with reduced risk for several chronic diseases.

L2 ANSWER 4 OF 5 MEDLINE on STN
AN 1999377596 MEDLINE
DN PubMed ID: 10448487
TI Dietary linoleic acid, immune inhibition and disease.
AU Sammon A M
CS Department of Surgery, University of Bristol, Bristol Royal Infirmary, UK.
SO Postgraduate medical journal, (1999 Mar) Vol. 75, No. 881, pp. 129-32.
Journal code: 0234135. ISSN: 0032-5473.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; AIDS
EM 199908
ED Entered STN: 19990913
Last Updated on STN: 19990913

Entered Medline: 19990830

AB Review of the evidence available in published literature supports a radical change in viewpoint with respect to disease in countries where maize is the predominant dietary component. In these countries, the pattern of disease is largely determined by a change in immune profile caused by metabolites of dietary linoleic acid. High intake of linoleic acid in a diet deficient in other polyunsaturated fatty acids and in **riboflavin** results in high tissue production of prostaglandin E2, which in turn causes inhibition of the proliferation and **cytokine** production of Th1 cells, mediators of cellular immunity. Tuberculosis, measles, hepatoma, secondary infection in HIV and kwashiorkor are all favoured by this reduction in cellular immunity. Diet-associated inhibition of the Th1 subset is a major contributor to the high prevalence of these diseases found in areas of sub-Saharan Africa where maize is the staple.

L2 ANSWER 5 OF 5 MEDLINE on STN

AN 1998011559 MEDLINE

DN PubMed ID: 9350472

TI Effect of antioxidative vitamins on immune function with clinical applications.

AU Grimble R F

CS Institute of Human Nutrition, University of Southampton, U.K.

SO International journal for vitamin and nutrition research. Internationale Zeitschrift fur Vitamin- und Ernährungsforschung. Journal international de vitaminologie et de nutrition, (1997) Vol. 67, No. 5, pp. 312-20. Ref: 69
Journal code: 1273304. ISSN: 0300-9831.

CY Switzerland

DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)

LA English

FS Priority Journals

EM 199801

ED Entered STN: 19980130

Last Updated on STN: 19980130

Entered Medline: 19980120

AB Infection and trauma cause inflammatory stress in patients. Tissue damage, enhanced inflammatory mediator production and suppressed lymphocyte function may occur as a consequence. The antioxidative vitamins, ascorbic acid and the tocopherols, are important not only for limiting tissue damage but also in preventing increased **cytokine** production which is a consequence of excessive activation of NF kappa B. Glutathione is a major endogenous antioxidant and is important for lymphocyte replication. Two vitamins, vitamin B6 and **riboflavin** participate in the maintenance of glutathione status. The former vitamin acts as a cofactor in the synthesis of cysteine (the rate limiting precursor for glutathione biosynthesis) and the latter vitamin is a cofactor for glutathione reductase. Deficiencies in tocopherol, vitamin B6 and **riboflavin** reduce cell numbers in lymphoid tissues of experimental animals and produce functional abnormalities in the cell mediated immune response. Ascorbic acid and tocopherols exert anti-inflammatory effects in studies in man and animals. In humans, dietary supplementation with ascorbic acid, tocopherols and vitamin B6 enhances a number of aspects of lymphocyte function. The effect is most apparent in the elderly.

=> s (cytokine or hypercytokinemia) (L) "vitamin b2"

MISMATCHED QUOTE 'B2''

Quotation marks (or apostrophes) must be used in pairs, one before and one after the expression you are setting off or masking.

=> s (cytokine or hypercytokinemia) (L) "vitamin b2"

74379 CYTOKINE

83 HYPERCYTOKINEMIA

129307 "VITAMIN"

19932 "B2"

1024 "VITAMIN B2"

("VITAMIN" (W) "B2")

L3 1 (CYTOKINE OR HYPERCYTOKINEMIA) (L) "VITAMIN B2"

=> d bib abs

L3 ANSWER 1 OF 1 MEDLINE on STN

AN 2005579919 MEDLINE

DN PubMed ID: 16112685

TI Inhibitory mechanisms of highly purified vitamin B2 on the productions of proinflammatory cytokine and NO in endotoxin-induced shock in mice.

AU Kodama Kohtarou; Suzuki Mamoru; Toyosawa Toshio; Araki Seiichi

CS Tsukuba Research Laboratories, Eisai Co., Ltd., 5-1-3 Tokodai, Tsukuba, Ibaraki 300-2635, Japan.. k-kodama@hhc.eisai.co.jp

SO Life sciences, (2005 Nov 26) Vol. 78, No. 2, pp. 134-9. Electronic Publication: 2005-08-19.

Journal code: 0375521. ISSN: 0024-3205.

CY England: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 200512

ED Entered STN: 20051101

Last Updated on STN: 20051216

Entered Medline: 20051207

AB Inhibitory effects of highly purified vitamin B2 (riboflavin-5'-sodium phosphate, >97%) on the interleukin (IL)-6, macrophage inflammatory protein (MIP)-2 and nitric oxide (NO) in LPS-induced shock mice were evaluated. Vitamin B2 at 20 mg/kg (protective effect on mice mortality induced by LPS), intravenously administered 6 h after LPS injection, significantly decreased the plasma elevated levels of IL-6 and MIP-2 at 9 and 12 h. In addition, vitamin B2 lowered the tissue concentration and the mRNA expression of IL-6 in lung and those of MIP-2 in liver at 9 h. Vitamin B2 also reduced concentration of MIP-2 concentration in lung, and inhibited mRNA expression in kidney, respectively. Vitamin B2 decreased the plasma elevated NO levels in accordance with a reduction in expression of inducible NO synthase (iNOS) both at 21 and 24 h. Accordingly, the reduction in elevated plasma cytokine levels and NO based on the inhibitory effect on local cytokine mRNA expression and iNOS would be responsible for the anti-septic effect of vitamin B2.

=> s (lymphokine) (L) "vitamin b2"

9062 LYMPHOKINE

129307 "VITAMIN"

19932 "B2"

1024 "VITAMIN B2"

("VITAMIN" (W) "B2")

L4 0 (LYMPHOKINE) (L) "VITAMIN B2"

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	13.41	13.62

STN INTERNATIONAL LOGOFF AT 18:59:12 ON 06 MAR 2006

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssptamxg1614

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

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NEWS 22 FEB 28 REGISTRY/ZREGISTRY enhanced with more experimental spectral
property data
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NEWS 24 MAR 03 Updates in PATDPA; addition of IPC 8 data without attributes

NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
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<http://download.cas.org/express/v8.0-Discover/>

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 19:15:42 ON 06 MAR 2006

=> file reg		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.63	0.63

FILE 'REGISTRY' ENTERED AT 19:17:28 ON 06 MAR 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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STRUCTURE FILE UPDATES: 5 MAR 2006 HIGHEST RN 875875-45-9
DICTIONARY FILE UPDATES: 5 MAR 2006 HIGHEST RN 875875-45-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=> s riboflavin
L1 2861 RIBOFLAVIN

=> d

L1 ANSWER 1 OF 2861 REGISTRY COPYRIGHT 2006 ACS on STN
RN 875389-52-9 REGISTRY
ED Entered STN: 27 Feb 2006
CN Riboflavin biosynthesis protein RibD diaminohydroxyphosphoribosylamin
opyrimid ine deaminase + 5-amino-6-(5- phosphoribosylamino)uracil
reductase oxidoreductase protein (Thiobacillus denitrificans strain ATCC
25259) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank AAZ98121
CN GenBank AAZ98121 (Translated from: GenBank CP000116)
FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR GenBank
LC STN Files: CA, CAPLUS

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s vitamin B2
1769 VITAMIN
7866 B2
L2 16 VITAMIN B2
(VITAMIN(W) B2)

=> d

L2 ANSWER 1 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
RN 195396-76-0 REGISTRY
ED Entered STN: 15 Oct 1997
CN Dehydrogenase, riboflavin (Schizophyllum commune clone pBRAf) (9CI) (CA
INDEX NAME)

OTHER NAMES:

CN GenBank AAB62250
CN GenBank AAB62250 (Translated from: GenBank AF005405)
CN Vitamin B2-aldehyde-forming enzyme (Schizophyllum commune strain ATCC
38719 clone pBRAf)
FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s "vitamin B2"
1769 "VITAMIN"
7866 "B2"
L3 16 "VITAMIN B2"
("VITAMIN" (W) "B2")

=> d 1-16

L3 ANSWER 1 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
RN 195396-76-0 REGISTRY
ED Entered STN: 15 Oct 1997
CN Dehydrogenase, riboflavin (Schizophyllum commune clone pBRAf) (9CI) (CA
INDEX NAME)

OTHER NAMES:

CN GenBank AAB62250
CN GenBank AAB62250 (Translated from: GenBank AF005405)
CN Vitamin B2-aldehyde-forming enzyme (Schizophyllum commune strain ATCC 38719 clone pBRAFF)
FS PROTEIN SEQUENCE
MF Unspecified
CI MAN
SR CA
LC STN Files: CA, CAPLUS

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 2 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
RN 194133-57-8 REGISTRY
ED Entered STN: 17 Sep 1997
CN DNA (Schizophyllum commune clone pBRAFF riboflavin dehydrogenase cDNA plus flanks) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN DNA (Schizophyllum commune strain ATCC 38719 clone pBRAFF vitamin B2-aldehyde-forming enzyme cDNA plus flanks)
CN GenBank AF005405
FS NUCLEIC ACID SEQUENCE
MF Unspecified
CI MAN
SR GenBank
LC STN Files: CA, CAPLUS, GENBANK

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 3 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
RN 129569-92-2 REGISTRY
ED Entered STN: 28 Sep 1990
CN L-Ribonic acid, 5-deoxy-5-(3,4-dihydro-7,8-dimethyl-2,4-dioxobenzo[g]pteridin-10(2H)-yl)-, monosodium salt (9CI) (CA INDEX NAME)

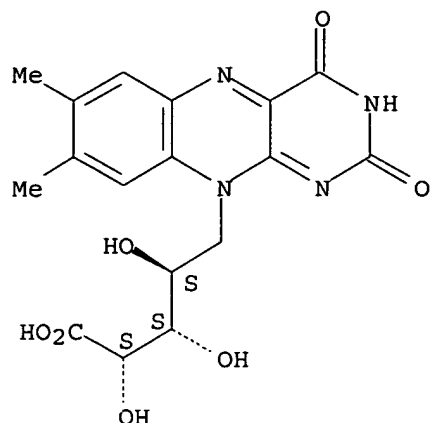
OTHER CA INDEX NAMES:

CN Benzo[g]pteridine, L-ribonic acid deriv.

OTHER NAMES:

CN Vitamin B2 acid sodium salt
FS STEREOSEARCH
MF C17 H18 N4 O7 . Na
SR CA
LC STN Files: CA, CAPLUS
CRN (59224-03-2)

Absolute stereochemistry.



● Na

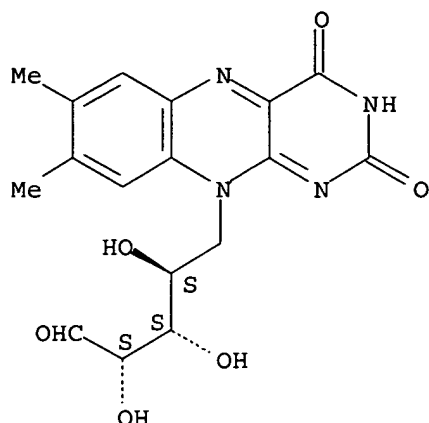
3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 4 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
RN 77649-60-6 REGISTRY
ED Entered STN: 16 Nov 1984
CN Dehydrogenase, riboflavin (9CI) (CA INDEX NAME)
OTHER NAMES:
CN **Enzymes, vitamin B2 aldehyde-forming**
CN Riboflavin 5'-hydroxymethyl dehydrogenase
CN Riboflavin dehydrogenase
CN **Vitamin B2 aldehyde-forming enzymes**
CN **Vitamin B2-aldehyde-forming enzyme**
MF Unspecified
CI MAN
LC STN Files: AGRICOLA, CA, CAPLUS

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
8 REFERENCES IN FILE CA (1907 TO DATE)
8 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 5 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
RN 59224-04-3 REGISTRY
ED Entered STN: 16 Nov 1984
CN L-Ribose, 5-deoxy-5-(3,4-dihydro-7,8-dimethyl-2,4-dioxobenzo[g]pteridin-10(2H)-yl)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzo[g]pteridine, L-ribose deriv.
OTHER NAMES:
CN Schizoflavin 2
CN **Vitamin B2 aldehyde**
FS STEREOSEARCH
MF C17 H18 N4 O6
LC STN Files: AGRICOLA, BIOSIS, CA, CAPLUS, MEDLINE

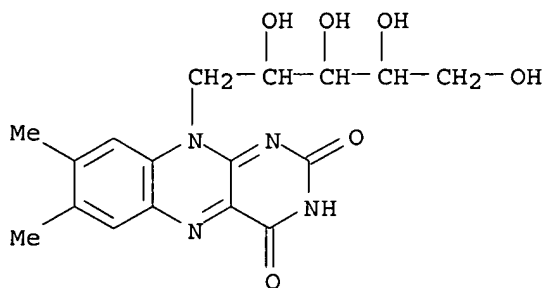
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

11 REFERENCES IN FILE CA (1907 TO DATE)
11 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 6 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
RN 42880-33-1 REGISTRY
ED Entered STN: 16 Nov 1984
CN Riboflavin, labeled with tritium (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzo[g]pteridine, riboflavin deriv.
OTHER NAMES:
CN **Vitamin B2 labeled with tritium**
MF C17 H20 N4 O6
LC STN Files: CA, CAPLUS, CHEMCATS, CSCHEM, IFICDB, IFIPAT, IFIUDB,
TOXCENTER, USPATFULL
IL XH-3



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 7 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
RN 39285-02-4 REGISTRY
ED Entered STN: 16 Nov 1984
CN Riboflavin, mixt. with 3-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-5-(2-hydroxyethyl)-4-methylthiazolium chloride and vitamin PP (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzo[g]pteridine, riboflavin deriv.
CN Thiazolium, 3-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-5-(2-hydroxyethyl)-4-methyl- chloride, mixt. contg. (9CI)
CN Vitamin PP, mixt. contg. (9CI)
OTHER NAMES:

CN Vitamin B1-vitamin B2-vitamin PP complex
FS STEREOSEARCH
MF C17 H20 N4 O6 . C12 H17 N4 O S . Cl . Unspecified
CI MXS
LC STN Files: CA, CAPLUS, TOXCENTER

CM 1

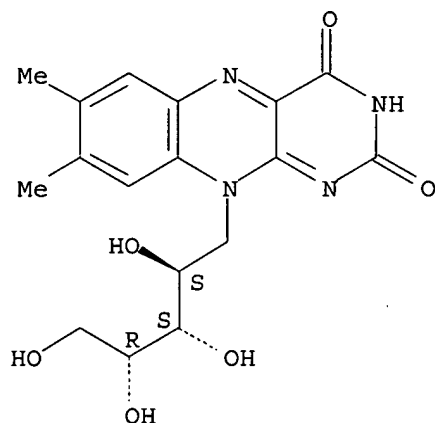
CRN 11032-50-1
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

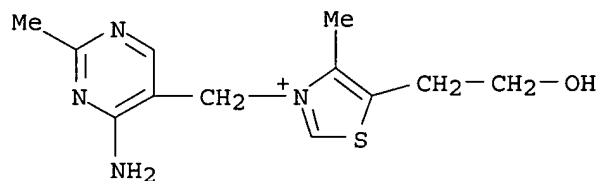
CRN 83-88-5
CMF C17 H20 N4 O6

Absolute stereochemistry.



CM 3

CRN 59-43-8 (70-16-6)
CMF C12 H17 N4 O S . Cl



● Cl⁻

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 8 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
RN 37999-33-0 REGISTRY
ED Entered STN: 16 Nov 1984
CN Riboflavin, O-β-D-glucopyranosyl- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Benzo[g]pteridine, riboflavin deriv.

OTHER NAMES:

CN Vitamin B2 glucoside

FS STEREOSEARCH

MF C23 H30 N4 O11

CI IDS

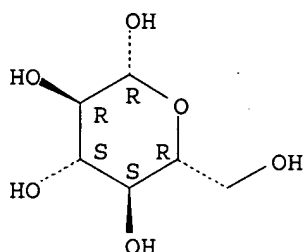
LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL

CM 1

CRN 492-61-5

CMF C6 H12 O6

Absolute stereochemistry. Rotation (+).

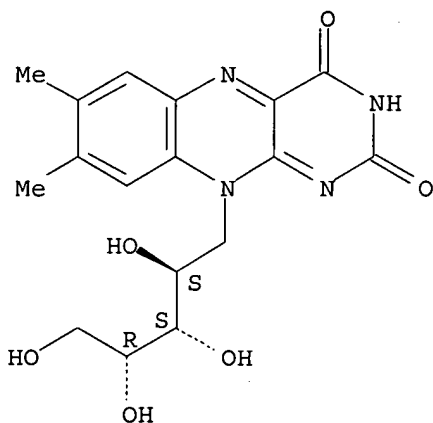


CM 2

CRN 83-88-5

CMF C17 H20 N4 O6

Absolute stereochemistry.



2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 9 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN

RN 20704-80-7 REGISTRY

ED Entered STN: 16 Nov 1984

CN Riboflavin, 5'-butanoate (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Benzo[g]pteridine, riboflavin deriv.

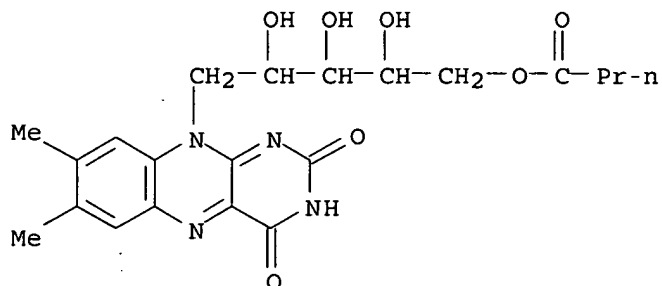
CN Butyric acid, 5'-ester with riboflavine

CN Riboflavine, 5'-butyrate (8CI)

OTHER NAMES:

CN Riboflavin 5'-butyrate

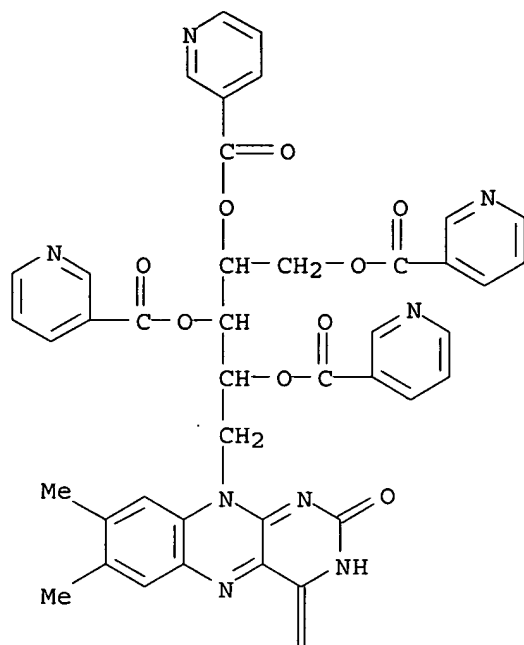
CN Vitamin B2-butyrate
 DR 80330-89-8
 MF C21 H26 N4 O7
 LC STN Files: AGRICOLA, BEILSTEIN*, CA, CAPLUS, MEDLINE, TOXCENTER
 (*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

29 REFERENCES IN FILE CA (1907 TO DATE)
 29 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 10 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 14984-66-8 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN Riboflavin, 2',3',4',5'-tetra-3-pyridinecarboxylate (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Benzo[g]pteridine, riboflavin deriv.
 CN Nicotinic acid, 2',3',4',5'-tetraester with riboflavine (8CI)
 CN Riboflavine, 2',3',4',5'-tetranicotinate (8CI)
 OTHER NAMES:
 CN B2-Nic
 CN Riboflavin tetranicotinate
 CN Riboflavine tetranicotinate
 CN RN 4
 CN Vitamin B2 tetranicotinate
 DR 24629-40-1
 MF C41 H32 N8 O10
 LC STN Files: BEILSTEIN*, CA, CAPLUS, TOXCENTER
 (*File contains numerically searchable property data)

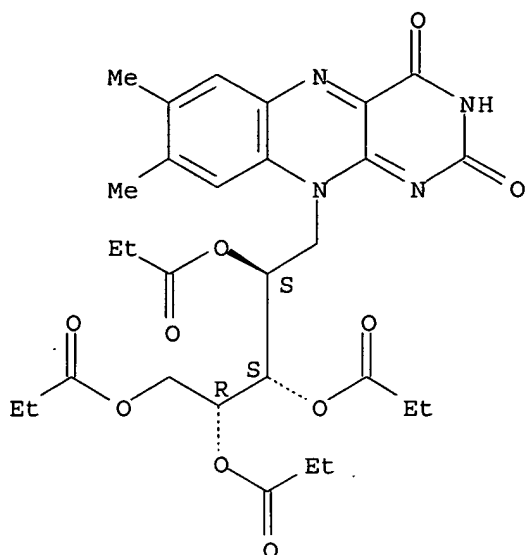


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

28 REFERENCES IN FILE CA (1907 TO DATE)
28 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 11 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
RN 7652-80-4 REGISTRY
ED Entered STN: 16 Nov 1984
CN Riboflavin, 2',3',4',5'-tetrapropionate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzo[g]pteridine, riboflavin deriv.
CN Riboflavine, 2',3',4',5'-tetrapropionate (7CI, 8CI)
OTHER NAMES:
CN 2',3',4',5'-Tetrapropionylriboflavin
CN Riboflavin tetrapropionate
CN Riboflavine tetrapropionate
CN Tetra-O-propionylriboflavin
CN **Vitamin B2 tetrapropionate**
FS STEREOSEARCH
MF C29 H36 N4 O10
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, IFICDB, IFIPAT,
IFIUDB, SPECINFO, TOXCENTER
(*File contains numerically searchable property data)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

34 REFERENCES IN FILE CA (1907 TO DATE)
 34 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L3 ANSWER 12 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN

RN 6184-17-4 REGISTRY

ED Entered STN: 16 Nov 1984

CN Riboflavin 5'-(dihydrogen phosphate), monosodium salt, dihydrate (9CI)
 (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Benzo[g]pteridine, riboflavin 5'-(dihydrogen phosphate) deriv.

CN Riboflavine 5'-(dihydrogen phosphate), monosodium salt, dihydrate (8CI)

OTHER NAMES:

CN Alloxazine mononucleotide dihydrate

CN Coflavinase dihydrate

CN Cytoflav dihydrate

CN Flavin mononucleotide dihydrate

CN Riboflavin 5'-phosphate ester monosodium salt dihydrate

CN Riboflavin 5'-phosphate sodium dihydrate

CN **Vitamin B2 phosphate (sodium salt) dihydrate**

FS STEREOSEARCH

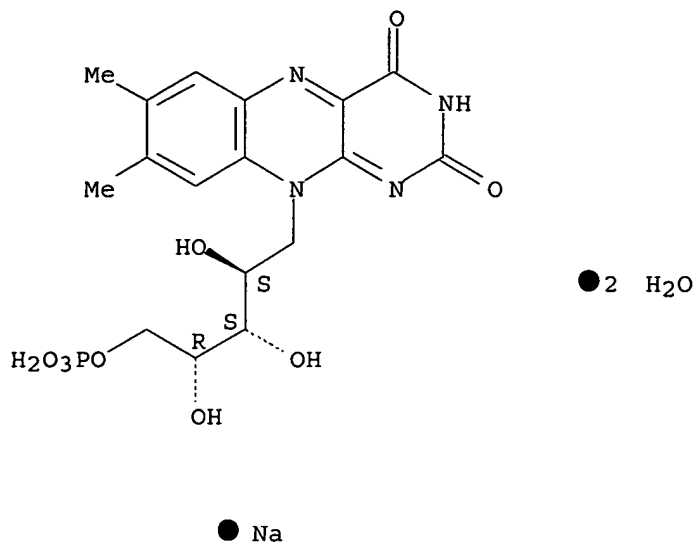
DR 15550-04-6

MF C17 H21 N4 O9 P . 2 H2 O . Na

LC STN Files: BEILSTEIN*, CA, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM, TOXCENTER
 (*File contains numerically searchable property data)

CRN (146-17-8)

Absolute stereochemistry.

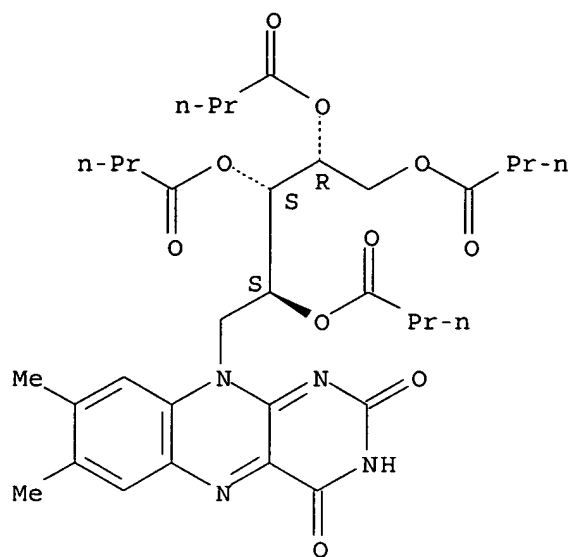


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 . ANSWER 13 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
RN 752-56-7 REGISTRY
ED Entered STN: 16 Nov 1984
CN Riboflavin, 2',3',4',5'-tetrabutanoate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzo[g]pteridine, riboflavin deriv.
CN Riboflavine, 2',3',4',5'-tetrabutyrates (7CI, 8CI)
OTHER NAMES:
CN Bituvitan
CN Eyekas
CN Hibon
CN Lacflavin
CN Riboflavin tetrabutylate
CN Riboflavin tetrabutyrates
CN Riboflavin-2',3',4',5'-tetrabutyrates
CN Riboflavine tetrabutyrates
CN Ribolact
CN Tetra-O-butyrylriboflavin
CN Viras
CN Vitamin B2 2',3',4',5'-tetrabutyrates
CN Vitamin B2 tetrabutyrates
CN Wakaflavin L
FS STEREOSEARCH
DR 47862-83-9, 47862-85-1
MF C33 H44 N4 O10
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM, DDFU, DRUGU, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(*Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.

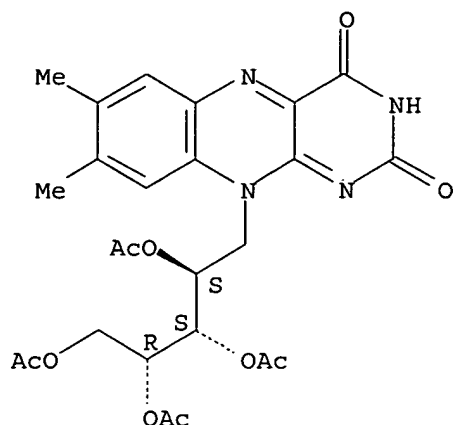


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

242 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 242 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 23 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L3 ANSWER 14 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 752-13-6 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN Riboflavin, 2',3',4',5'-tetraacetate (8CI, 9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Benzo[g]pteridine, riboflavin deriv.
 CN Riboflavine tetraacetate (6CI)
 CN Riboflavine, 2',3',4',5'-tetraacetate (7CI)
 OTHER NAMES:
 CN 2',3',4',5'-Tetra-O-acetylriboflavin
 CN 2',3',4',5'-Tetraacetylriboflavin
 CN Riboflavin tetraacetate
 CN Tetra-O-acetylriboflavin
 CN Tetra-O-acetylriboflavine
 CN **Vitamin B2 tetraacetate**
 FS STEREOSEARCH
 DR 34475-02-0
 MF C25 H28 N4 O10
 CI COM
 LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMLIST, IFICDB, IFIPAT, IFIUDb, IPA, MEDLINE, SPECINFO, TOXCENTER, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: EINECS**
 (**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

168 REFERENCES IN FILE CA (1907 TO DATE)
 14 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 168 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 12 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L3 ANSWER 15 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN

RN 146-17-8 REGISTRY

ED Entered STN: 16 Nov 1984

CN Riboflavin 5'-(dihydrogen phosphate) (8CI, 9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Benzo[g]pteridine, riboflavin 5'-(dihydrogen phosphate) deriv.

CN Riboflavine 5-phosphate (6CI)

OTHER NAMES:

CN Alloxazine mononucleotide

CN Bisulase

CN E 101

CN E 101a

CN Flanin

CN Flavin mononucleotide

CN Flavine mononucleotide

CN Flavol

CN FMN

CN Riboflavin 5'-monophosphate

CN Riboflavin 5'-phosphate

CN Riboflavin mononucleotide

CN Riboflavin monophosphate

CN Riboflavin phosphate

CN Riboflavine 5'-monophosphate

CN Riboflavine 5'-phosphate

CN Riboflavine dihydrogen phosphate

CN Riboflavine monophosphate

CN Riboflavine phosphate

CN **Vitamin B2 phosphate**

FS STEREOSEARCH

DR 788107-70-0, 97866-71-2, 41593-13-9

MF C17 H21 N4 O9 P

CI COM

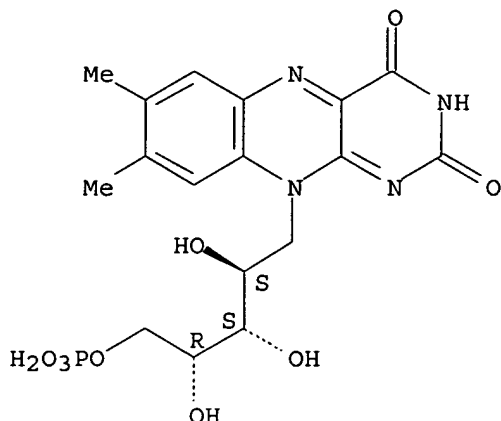
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHM, DDFU, DIOGENES, DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IMSCOSEARCH, IPA, MEDLINE, MRCK*, NIOSHTIC, PROMT, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)

Other Sources: EINECS**

(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



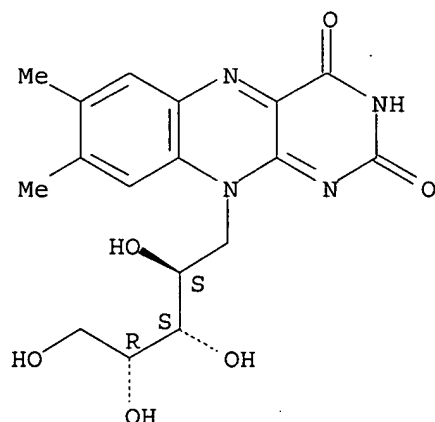
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3421 REFERENCES IN FILE CA (1907 TO DATE)
112 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3426 REFERENCES IN FILE CAPLUS (1907 TO DATE)
23 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L3 ANSWER 16 OF 16 REGISTRY COPYRIGHT 2006 ACS on STN
RN 83-88-5 REGISTRY
ED Entered STN: 16 Nov 1984
CN Riboflavin (8CI, 9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzo[g]pteridine, riboflavin deriv.
CN Riboflavine (7CI)
OTHER NAMES:
CN (-)-Riboflavin
CN 1-Deoxy-1-(3,4-dihydro-7,8-dimethyl-2,4-dioxobenzo[g]pteridin-10(2H)-yl)-D-ribose
CN 6,7-Dimethyl-9-D-ribitylisoalloxazine
CN 6,7-Dimethyl-9-ribitylisoalloxazine
CN Beflavin
CN Beflavine
CN Benzo[g]pteridine-2,4(3H,10H)-dione, 7,8-dimethyl-10-(D-ribo-2,3,4,5-tetrahydroxypentyl)-
CN C.I. 50900
CN C.I. Food Yellow 15
CN D-Ribitol, 1-deoxy-1-(3,4-dihydro-7,8-dimethyl-2,4-dioxobenzo[g]pteridin-10(2H)-yl)-
CN E 101
CN E 101 (dye)
CN Flavaxin
CN Flavin BB
CN Flaxain
CN Food Yellow 15
CN Hyre
CN Lactobene
CN Lactoflavin
CN Lactoflavine
CN NCI 0033298
CN NSC 33298
CN Ribipca
CN Ribocrisina
CN Riboderm

CN Ribosyn
 CN Ribotone
 CN Ribovel
 CN Russupteridine yellow III
 CN San Yellow B
 CN Vitaflavine
 CN Vitamin B2
 CN Vitamin G
 CN Vitasan B2
 FS STEREOSEARCH
 DR 130609-39-1, 535950-32-4
 MF C17 H20 N4 O6
 CI COM
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS,
 BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS,
 CHEMINFORMRX, CHEMLIST, CIN, CSCHM, CSNB, DDFU, DIOGENES, DRUGU,
 EMBASE, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*,
 MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, PS, RTECS*,
 SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**, WHO
 (**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

18602 REFERENCES IN FILE CA (1907 TO DATE)
 307 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 18618 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

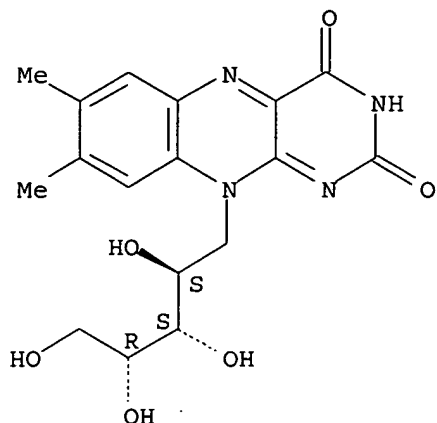
=> s 83-88-5/rn
 L4 1 83-88-5/RN

=> d

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 83-88-5 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN Riboflavin (8CI, 9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Benzo[g]pteridine, riboflavin deriv.
 CN Riboflavine (7CI)
 OTHER NAMES:
 CN (-)-Riboflavin

CN 1-Deoxy-1-(3,4-dihydro-7,8-dimethyl-2,4-dioxobenzo[g]pteridin-10(2H)-yl)-D-
 ribitol
 CN 6,7-Dimethyl-9-D-ribitylisoalloxazine
 CN 6,7-Dimethyl-9-ribitylisoalloxazine
 CN Beflavin
 CN Beflavine
 CN Benzo[g]pteridine-2,4(3H,10H)-dione, 7,8-dimethyl-10-(D-ribo-2,3,4,5-
 tetrahydroxypentyl)-
 CN C.I. 50900
 CN C.I. Food Yellow 15
 CN D-Ribitol, 1-deoxy-1-(3,4-dihydro-7,8-dimethyl-2,4-dioxobenzo[g]pteridin-
 10(2H)-yl)-
 CN E 101
 CN E 101 (dye)
 CN Flavaxin
 CN Flavin BB
 CN Flaxain
 CN Food Yellow 15
 CN Hyre
 CN Lactobene
 CN Lactoflavin
 CN Lactoflavine
 CN NCI 0033298
 CN NSC 33298
 CN Ribipca
 CN Ribocrisina
 CN Riboderm
 CN Ribosyn
 CN Ribotone
 CN Ribovel
 CN Russupteridine yellow III
 CN San Yellow B
 CN Vitaflavine
 CN Vitamin B2
 CN Vitamin G
 CN Vitasan B2
 FS STEREOSEARCH
 DR 130609-39-1, 535950-32-4
 MF C17 H20 N4 O6
 CI COM
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS,
 BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS,
 CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGU,
 EMBASE, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*,
 MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, PS, RTECS*,
 SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**, WHO
 (**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

18602 REFERENCES IN FILE CA (1907 TO DATE)
 307 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 18618 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s l4 and (hypercytokinemia or lymphokine or cytokine)

0 HYPERCYTOKINEMIA

463 LYMPHOKINE

11729 CYTOKINE

L5 0 L4 AND (HYPERCYTOKINEMIA OR LYMPHOKINE OR CYTOKINE)

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

76.38

77.01

FILE 'CAPLUS' ENTERED AT 19:20:31 ON 06 MAR 2006

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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 6 Mar 2006 VOL 144 ISS 11

FILE LAST UPDATED: 5 Mar 2006 (20060305/ED)

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<http://www.cas.org/infopolicy.html>

=> s l4 and (hypercytokinemia or lymphokine or cytokine)

18618 L4

65 HYPERCYTOKINEMIA

11555 LYMPHOKINE
91836 CYTOKINE

L6 7 L4 AND (HYPERCYTOKINEMIA OR LYMPHOKINE OR CYTOKINE)

=> d 1-7 bib abs

L6 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:1165241 CAPLUS

TI Inhibitory mechanisms of highly purified vitamin B2 on the productions of proinflammatory cytokine and NO in endotoxin-induced shock in mice

AU Kodama, Kohtarou; Suzuki, Mamoru; Toyosawa, Toshio; Araki, Seiichi

CS Tsukuba Research Laboratories, Eisai Co., Ltd., Tsukuba, Ibaraki, 300-2635, Japan

SO Life Sciences (2005), 78(2), 134-139

CODEN: LIFSAK; ISSN: 0024-3205

PB Elsevier B.V.

DT Journal

LA English

AB Inhibitory effects of highly purified vitamin B2 (riboflavin-5'-sodium phosphate, > 97%) on the interleukin (IL)-6, macrophage inflammatory protein (MIP)-2 and nitric oxide (NO) in LPS-induced shock mice were evaluated. Vitamin B2 at 20 mg/kg (protective effect on mice mortality induced by LPS), i.v. administered 6 h after LPS injection, significantly decreased the plasma elevated levels of IL-6 and MIP-2 at 9 and 12 h. In addition, vitamin B2 lowered the tissue concentration and the mRNA expression of

IL-6 in lung and those of MIP-2 in liver at 9 h. Vitamin B2 also reduced concentration of MIP-2 concentration in lung, and inhibited mRNA expression in kidney,

resp. Vitamin B2 decreased the plasma elevated NO levels in accordance with a reduction in expression of inducible NO synthase (iNOS) both at 21 and 24 h. Accordingly, the reduction in elevated plasma cytokine levels and NO based on the inhibitory effect on local cytokine mRNA expression and iNOS would be responsible for the anti-septic effect of vitamin B2.

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:1054462 CAPLUS

DN 142:28174

TI Pharmaceutical compositions containing riboflavins and ubidecarenonones, preparations separately containing two components, use of them as cytokine production inhibitors, and the inhibitors

IN Kodama, Kotaro; Araki, Seiichi; Toyosawa, Itsuo; Suzuki, Mamoru; Kimata, Motoki; Tsujimoto, Michihiko

PA Eisai Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004345988	A2	20041209	JP 2003-143179	20030521
PRAI	JP 2003-143179		20030521		

AB Compsn. containing ≥ 1 selected from riboflavin, its derivs., or their pharmacol. acceptable salts and ≥ 1 selected from ubidecarenone, its derivs., and their pharmacol. acceptable salts are useful for treatment of hypercytokinemia in Alzheimer disease, rheumatoid arthritis, gout, septicemia, etc., and chronic inflammatory diseases such as dermatitis, mastitis, etc., alleviation of phys. fatigue, and activation of energy production. Thus, simultaneous addition of 5'-FMN-Na and CoQ10 to mouse peritoneal macrophage significantly inhibited LPS-induced IL-6 production

L6 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:471823 CAPLUS
 DN 141:167278
 TI Effects of intravenous infusion of highly purified vitamin B2 on lipopolysaccharide-induced shock and bacterial infection in mice
 AU Toyosawa, Toshio; Suzuki, Mamoru; Kodama, Kohtarou; Araki, Seiichi
 CS Tsukuba Research Laboratories, Eisai Co., Ltd., Ibaraki, Tsukuba, 300-2635, Japan
 SO European Journal of Pharmacology (2004), 492(2-3), 273-280
 CODEN: EJPHAZ; ISSN: 0014-2999
 PB Elsevier Science B.V.
 DT Journal
 LA English
 AB We investigated the effect of an i.v. infusion of highly purified vitamin B2 (riboflavin 5'-sodium phosphate: purity >97%) on lipopolysaccharide-induced shock and bacterial infection in mice. Six hours after lipopolysaccharide injection or 1 h after bacterial infection, vitamin B2 or human activated protein C (APC) was administered by 6-h i.v. infusion. Vitamin B2 at 10 mg/kg/6 h and up to 80 mg/kg/6 h significantly improved lipopolysaccharide-induced endotoxin shock. APC was also effective at low doses, but was deleterious at higher doses. Moreover, vitamin B2 at 80 mg/kg/6 h significantly reduced the lethality of Escherichia coli and Staphylococcus aureus infection, whereas APC at up to 600 units/kg/6 h was ineffective. The i.v. infusion of vitamin B2 reduced the elevations of proinflammatory cytokines and nitric oxide induced by lipopolysaccharide. These results suggest that i.v. infusion of vitamin B2 represents a promising strategy for the treatment of sepsis and septic shock.
 RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:315463 CAPLUS
 DN 140:332435
 TI Effect of prenatal vitamin supplementation on lower-genital levels of HIV type 1 and interleukin type 1 β at 36 weeks of gestation
 AU Fawzi, Wafaie; Msamanga, Gernard; Antelman, Gretchen; Xu, Chong; Hertzmark, Ellen; Spiegelman, Donna; Hunter, David; Anderson, Deborah
 CS Departments of Nutrition, Epidemiology, Harvard School of Public Health, Boston, MA, USA
 SO Clinical Infectious Diseases (2004), 38(5), 716-722
 CODEN: CIDIEL; ISSN: 1058-4838
 PB University of Chicago Press
 DT Journal
 LA English
 AB Micronutrient status has been associated with shedding of human immunodeficiency virus type 1 (HIV-1) in the lower-genital tract in observational studies. We examined the effect of vitamin supplements on genital HIV-1 shedding and interleukin-1 β (IL-1 β), a cytokine marker of vaginal inflammation and promotion of HIV-1 infection. Consenting HIV-1-infected pregnant women were randomized to receive daily supplementation with vitamin A and/or multivitamins B-complex, C, and E with use of a factorial design. Cervicovaginal lavage (CVL) specimens were obtained shortly before delivery. Significantly more women who received vitamin A had detectable levels of HIV-1 in CVL (74.8%), compared with those who did not receive vitamin A (65.1%) (P = .04, by multivariate anal.). Multivitamin B-complex, C, and E had no effect on the risk of viral shedding. Our results raise concern about the use of vitamin A supplements by HIV-1-infected women. Use of prenatal multivitamin supplements (including vitamins B-complex, C, and E) should be continued despite the lack of effect on HIV-1 transmission because of previously reported pos. effects on maternal health and pregnancy outcomes.
 RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2003:818294 CAPLUS
 DN 139:297048
 TI Drugs containing riboflavin compound
 IN Araki, Seiichi; Suzuki, Mamoru; Kodama, Kohtarou; Toyosawa, Toshio
 PA Eisai Co., Ltd., Japan
 SO PCT Int. Appl., 31 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003084545	A1	20031016	WO 2003-JP4511	20030409
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003227475	A1	20031020	AU 2003-227475	20030409
PRAI	JP 2002-106685	A	20020409		
	WO 2003-JP4511	W	20030409		

AB Disclosed is a drug composition comprising at least one member selected from among riboflavin, a riboflavin derivative and a pharmacol. acceptable salt thereof, at least one member selected from among protein C, an activated protein C and derivs. of these, and/or valine as active ingredients and/or an immune activator or protective remedy of enhanced efficacy. An i.v. injection of Na riboflavin phosphate at 10 mg/kg and activated protein C 75 units/kg to endotoxin-induced shock model mice significantly increased the survival rate.

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1999:795934 CAPLUS
 DN 132:11674
 TI Methods for monitoring the stability of protein or cellular product secretion by cells in a fermenter culture
 IN Carson, Gerald R.; Hammill, Linda
 PA BASF Aktiengesellschaft, USA
 SO PCT Int. Appl., 55 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9964560	A1	19991216	WO 1999-US12862	19990608
	W: CN, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRAI	US 1998-94430	A2	19980608		

AB The invention features a method for monitoring the stability of a (recombinant) protein or other cellular product secreted by cells in a fermenter culture. The method involves, harvesting from a fermenter culture a first sample of cells that secrete a protein or cellular product and incorporating the cells from the first sample into gel microdrops (GMDs), and measuring secretion of the protein or cellular product by cells in one or more GMD samples over time by GMD secretion assay. The

protein secreted by the cells may be, for example, an antibody, cytokine, or growth factor. The cellular product secreted by the cells may be, for example, an antibiotic, amino acid, vitamin, or carbohydrate. Secretion of recombinant antibody D2E7 in D8/E cells was shown.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1997:390697 CAPLUS
DN 127:2744
TI Method for ex vivo proliferation and differentiation of adult pancreatic islet cells, media useful therefor and uses thereof
IN Soon-Shiong, Patrick; Varsanyi-Nagy, Maria; Ferreri, Kevin; Moloney, Molly; Heintz, Roswitha
PA Vivorx, Inc., USA
SO PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9716536	A1	19970509	WO 1996-US16396	19961011
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG				
	AU 9674439	A1	19970522	AU 1996-74439	19961011
PRAI	US 1995-558591	A	19951030		
	WO 1996-US16396	W	19961011		
AB	A method for inducing the proliferation and differentiation of neonatal and/or adult human or non-human pancreatic islets to produce a product useful, for example, as a therapeutic agent for treatment of diabetes was developed. The method involves a series of complex cell culture media containing necessary nutrients and growth factors, a human cytokine (hepatocyte growth factor or scatter factor), a microgravity culture vessel for promoting 3-dimensional growth, and mol. biol. assays for measuring insulin promoter activity. A method for providing a hybrid organoid comprising a combination of donor and recipient cell types is also described.				

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* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

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<http://www.cas.org/ONLINE/UG/regprops.html>

=> s e1-e6

1 13345-95-4/BI
(13345-95-4/RN)

1 146-14-5/BI
(146-14-5/RN)

1 146-17-8/BI
(146-17-8/RN)

1 6155-39-1/BI
(6155-39-1/RN)

1 752-56-7/BI
(752-56-7/RN)

1 83869-56-1/BI
(83869-56-1/RN)

L8 6 (13345-95-4/BI OR 146-14-5/BI OR 146-17-8/BI OR 6155-39-1/BI OR
752-56-7/BI OR 83869-56-1/BI)

=> d 1-6

L8 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN

RN 83869-56-1 REGISTRY

ED Entered STN: 16 Nov 1984

CN Colony-stimulating factor 2 (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Colony-stimulating factor II

CN CSF 2

CN CSF α

CN GM-CSF

CN Granulocyte-macrophage colony-simulating factor

CN Granulocyte-macrophage colony-stimulating activity

CN Granulocyte-macrophage colony-stimulating factor

CN Granulocyte-macrophage-inducing factor

CN Granulocyte-monocyte colony-stimulating factor

CN Macrophage-granulocyte CSF

CN Macrophage-granulocyte-colony-stimulating factor

CN NIF-T

MF Unspecified

CI PMS, COM, MAN

PCT Manual registration

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOSIS, CA, CAPLUS, CBNB,
CHEMCATS, CIN, CSCHEM, CSNB, IMSPATENTS, IMSRESEARCH, IPA, MEDLINE,
MRCK*, PHAR, PROMT, PROUSDDR, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

11970 REFERENCES IN FILE CA (1907 TO DATE)

237 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

11980 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L8 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN

RN 13345-95-4 REGISTRY

ED Entered STN: 16 Nov 1984

CN Riboflavin, 1,5-dihydro- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Alloxazine, 5,10-dihydro-7,8-dimethyl-10-(D-ribo-2,3,4,5-
tetrahydroxypentyl)- (7CI, 8CI)

CN Benzo[g]pteridine, riboflavin deriv.

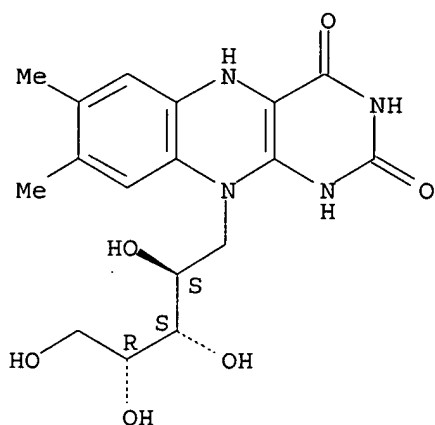
CN Isoalloxazine, 1,5-dihydro-7,8-dimethyl-10-(ribo-2,3,4,5-
tetrahydroxypentyl)- (6CI)

OTHER NAMES:

CN 1,5-Dihydroriboflavin

CN 5,10-Dihydro-7,8-dimethyl-10-(D-ribo-2,3,4,5-tetrahydroxypentyl)benzo[g]pteridine-2,4(1H,3H)-dione
 CN Benzo[g]pteridine-2,4(1H,3H)-dione, 5,10-dihydro-7,8-dimethyl-10-(D-ribo-2,3,4,5-tetrahydroxypentyl)-
 CN Dihydroriboflavin
 CN Leucoriboflavin
 CN Leucoriboflavine
 CN Leukoflavin
 CN Reduced riboflavin
 FS STEREOSEARCH
 DR 23048-96-6, 98757-51-8
 MF C17 H22 N4 O6
 CI COM
 LC STN Files: AGRICOLA, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, TOXCENTER, USPATFULL
 (*File contains numerically searchable property data)

Absolute stereochemistry.



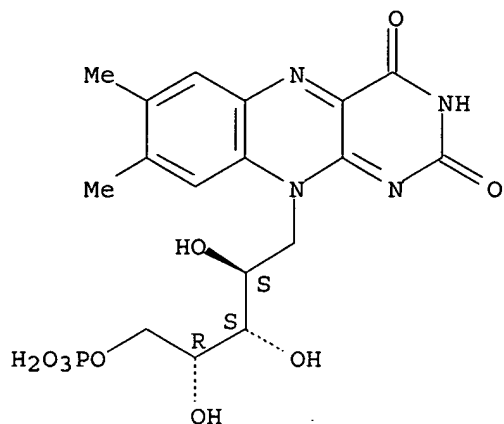
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

66 REFERENCES IN FILE CA (1907 TO DATE)
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 66 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L8 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 6155-39-1 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN Riboflavin 5'-(dihydrogen phosphate), compd. with 2,2'-iminobis[ethanol]
 (1:1) (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Benzo[g]pteridine, riboflavin 5'-(dihydrogen phosphate) deriv.
 CN Ethanol, 2,2'-iminobis-, compd. with riboflavin 5'-(dihydrogen phosphate)
 (1:1) (9CI)
 CN Ethanol, 2,2'-iminodi-, compd. with riboflavine 5'-phosphate (1:1)
 CN Riboflavine 5'-(dihydrogen phosphate), compd. with 2,2'-iminodiethanol
 (1:1) (8CI)
 OTHER NAMES:
 CN Riboflavin phosphate monodiethanolamine salt
 FS STEREOSEARCH
 MF C17 H21 N4 O9 P . C4 H11 N O2
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CRN 146-17-8
CMF C17 H21 N4 O9 P

Absolute stereochemistry.



CM 2

CRN 111-42-2
CMF C4 H11 N O2

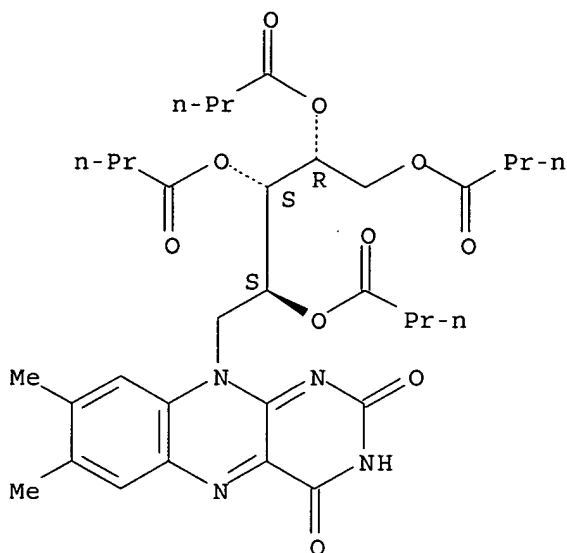
HO-CH₂-CH₂-NH-CH₂-CH₂-OH

3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L8 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN
RN 752-56-7 REGISTRY
ED Entered STN: 16 Nov 1984
CN Riboflavin, 2',3',4',5'-tetrabutanoate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzo[g]pteridine, riboflavin deriv.
CN Riboflavine, 2',3',4',5'-tetrabutyrate (7CI, 8CI)
OTHER NAMES:
CN Bituvitan
CN Eyekas
CN Hibon
CN Lacflavin
CN Riboflavin tetrabutylate
CN Riboflavin tetrabutyrate
CN Riboflavin-2',3',4',5'-tetrabutyrate
CN Riboflavine tetrabutyrate
CN Ribolact
CN Tetra-O-butyrylriboflavin
CN Viras
CN Vitamin B2 2',3',4',5'-tetrabutyrate
CN Vitamin B2 tetrabutyrate
CN Wakaflavin L
FS STEREOSEARCH
DR 47862-83-9, 47862-85-1
MF C33 H44 N4 O10
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM, DDFU, DRUGU, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)
 Other Sources: EINECS**
 (**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



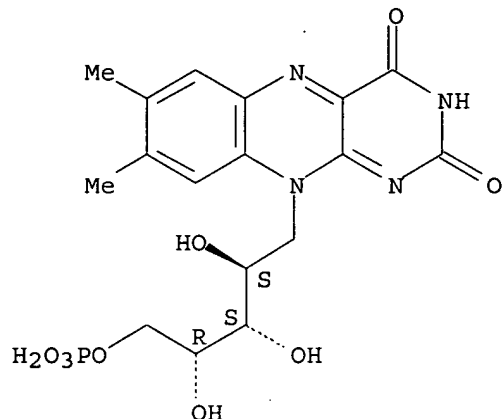
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

242 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 242 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 23 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L8 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 146-17-8 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN Riboflavin 5'-(dihydrogen phosphate) (8CI, 9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Benzo[g]pteridine, riboflavin 5'-(dihydrogen phosphate) deriv.
 CN Riboflavine 5-phosphate (6CI)
 OTHER NAMES:
 CN Alloxazine mononucleotide
 CN Bisulase
 CN E 101
 CN E 101a
 CN Flanin
 CN Flavin mononucleotide
 CN Flavine mononucleotide
 CN Flavol
 CN FMN
 CN Riboflavin 5'-monophosphate
 CN Riboflavin 5'-phosphate
 CN Riboflavin mononucleotide
 CN Riboflavin monophosphate
 CN Riboflavin phosphate
 CN Riboflavine 5'-monophosphate
 CN Riboflavine 5'-phosphate
 CN Riboflavine dihydrogen phosphate
 CN Riboflavine monophosphate
 CN Riboflavine phosphate
 CN Vitamin B2 phosphate
 FS STEREOSEARCH

DR 788107-70-0, 97866-71-2, 41593-13-9
 MF C17 H21 N4 O9 P
 CI COM
 LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IMSCOSEARCH, IPA, MEDLINE, MRCK*, NIOSHTIC, PROMT, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: EINECS**
 (**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



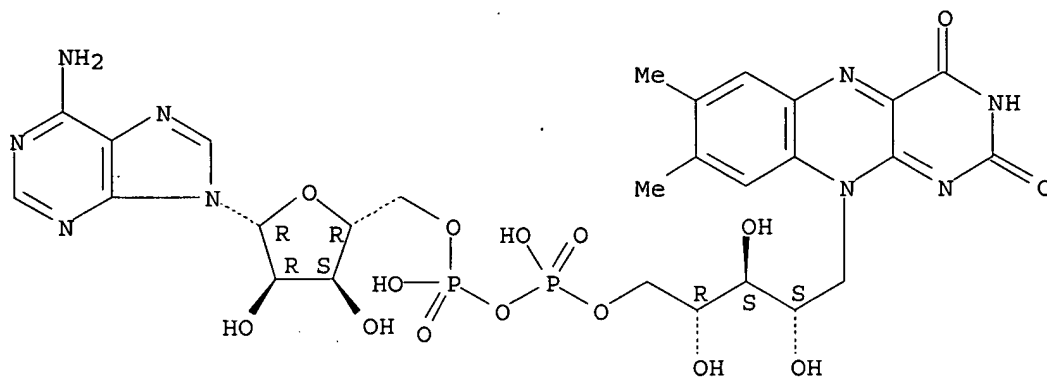
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3421 REFERENCES IN FILE CA (1907 TO DATE)
 112 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 3426 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 23 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L8 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 146-14-5 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN Riboflavin 5'-(trihydrogen diphosphate), P'→5'-ester with adenosine (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Adenosine 5'-(trihydrogen pyrophosphate), 5'→5'-ester with riboflavine (8CI)
 CN Benzo[g]pteridine, riboflavin 5'-(trihydrogen diphosphate) deriv.
 CN Riboflavine, 5'-ester with adenosine 5'-diphosphate (8CI)
 OTHER NAMES:
 CN Adenine-flavin dinucleotide
 CN Adenine-flavine dinucleotide
 CN Adenine-riboflavin dinucleotide
 CN Adenine-riboflavine dinucleotide
 CN FAD
 CN Fademin
 CN Flavin-adenine dinucleotide
 CN Flavinat
 CN Flavine adenosine diphosphate
 CN Flavine-adenine dinucleotide
 CN Flavitan
 CN NSC 112207
 CN Riboflavin 5'-adenosine diphosphate
 CN Riboflavin-adenine dinucleotide
 CN Riboflavine-adenine dinucleotide

FS STEREOSEARCH
 DR 16426-55-4
 MF C27 H33 N9 O15 P2
 CI COM
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO,
 CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU,
 DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IMSCOSEARCH, IPA,
 MEDLINE, MRCK*, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS*, TOXCENTER,
 USAN, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: EINECS**, NDSL**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5999 REFERENCES IN FILE CA (1907 TO DATE)
 142 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 6005 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 32 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s 18

1 13345-95-4/BI
 (13345-95-4/RN)
 1 146-14-5/BI
 (146-14-5/RN)
 1 146-17-8/BI
 (146-17-8/RN)
 1 6155-39-1/BI
 (6155-39-1/RN)
 1 752-56-7/BI
 (752-56-7/RN)
 1 83869-56-1/BI
 (83869-56-1/RN)
 L9 6 (13345-95-4/BI OR 146-14-5/BI OR 146-17-8/BI OR 6155-39-1/BI OR
 752-56-7/BI OR 83869-56-1/BI)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	11.84	116.83
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-5.25

FILE 'CAPLUS' ENTERED AT 19:22:07 ON 06 MAR 2006

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FILE COVERS 1907 - 6 Mar 2006 VOL 144 ISS 11
FILE LAST UPDATED: 5 Mar 2006 (20060305/ED)

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=> s l8

L10 20415 L8

=> s l10 and (hypercytokinemia or lymphokine or cytokine)

65 HYPERCYTOKINEMIA

11555 LYMPHOKINE

91836 CYTOKINE

L11 4840 L10 AND (HYPERCYTOKINEMIA OR LYMPHOKINE OR CYTOKINE)

=>

=> s l10 and (hypercytokinemia or lymphokine or cytokine)

65 HYPERCYTOKINEMIA

11555 LYMPHOKINE

91836 CYTOKINE

L12 4840 L10 AND (HYPERCYTOKINEMIA OR LYMPHOKINE OR CYTOKINE)

=> s l9 and (hypercytokinemia or lymphokine or cytokine)

20415 L9

65 HYPERCYTOKINEMIA

11555 LYMPHOKINE

91836 CYTOKINE

L13 4840 L9 AND (HYPERCYTOKINEMIA OR LYMPHOKINE OR CYTOKINE)

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

31.35

148.18

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-5.25

FILE 'REGISTRY' ENTERED AT 19:40:09 ON 06 MAR 2006

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STRUCTURE FILE UPDATES: 5 MAR 2006 HIGHEST RN 875875-45-9

DICTIONARY FILE UPDATES: 5 MAR 2006 HIGHEST RN 875875-45-9